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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,065	06/20/2001	Yoshiaki Hirano	35.C15463	1688

5514 7590 04/13/2006

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EXAMINER	
MILIA, MARK R	
ART UNIT	**PAPER NUMBER**
2625	

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/884,065	HIRANO, YOSHIAKI	
	Examiner	Art Unit	
	Mark R. Milia	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/4/05 has been entered. Currently, claims 16-29 are pending.

Specification

2. Applicant's arguments provide support for the amendment to the specification that was objected to in the Final Office Action mailed on 8/11/05. Therefore the objection has been withdrawn.

Claim Rejections - 35 USC § 112

3. Applicant's arguments regarding the rejection of claims 16-29 on the grounds that the claims contain new matter are persuasive. Therefore the rejection has been withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 16-24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of U.S. Patent No. 6330374 to Yamaguchi et al.

Regarding claim 16, Sato discloses a printer comprising: a control unit having a first memory for storing image data generated based on print data received from an external apparatus (see Fig. 1 (7) and column 2 lines 30-33), and an engine unit having a second memory for storing the image data received from said control unit and a print engine for printing the image data stored in the second memory (see Fig. 1 (2), column 3 lines 48-61, and column 4 lines 25-44), wherein said control unit includes a transfer unit for transferring the image data read from the first memory to the second memory (see Fig. 1 (10) and column 2 lines 47-55), and wherein the transfer unit includes a third memory for storing the image data read from the first memory and reads rotated image data from the third memory and transfers the rotated image data to the second memory (see Fig. 1 (8), column 2 lines 34-35, 47-55, and 61-64, column 3 lines 31-40, column 4 lines 52-59, and column 5 lines 4-20).

Sato does not disclose expressly transferring the rotated image data to a second memory without transferring the rotated image data to the first memory.

Yamaguchi discloses transferring a rotated image data to a second memory without transferring the rotated image data to the first memory (see Fig. 4 and column 12 line 66-column 13 line 25).

Regarding claim 19, Sato discloses a control method carried out in a printer that comprises a control unit having a first memory for storing image data generated based on print data received from an external apparatus, and an engine unit having a second memory for storing the image data received from the control unit and a print engine for printing the image data stored in the second memory (see Fig. 1, column 2 lines 30-33, column 3 lines 48-61, and column 4 lines 25-44) said method comprising: a storing step of storing the image data read from the first memory in a third memory (see column 2 lines 30-35), a reading step of reading rotated image data from the third memory (see column 2 lines 40-55, column 3 lines 30-40, and column 5 lines 4-20), and a transferring step of transferring the rotated image data to the second memory (see column 3 lines 30-40, column 4 lines 25-44 and 52-59, and column 5 lines 4-20).

Sato does not disclose expressly transferring the rotated image data to a second memory without transferring the rotated image data to the first memory.

Yamaguchi discloses transferring a rotated image data to a second memory without transferring the rotated image data to the first memory (see Fig. 4 and column 12 line 66-column 13 line 25).

Regarding claim 22, Sato discloses a printer comprising: a control unit having a first memory for storing image data generated based on print data received from an external apparatus (see Fig. 1 (7) and column 2 lines 30-33), and an engine unit having a second memory for storing the image data received from said control unit and a print engine for printing the image data stored in the second memory (see Fig. 1 (2), column 3 lines 48-61, and column 4 lines 25-44), wherein said control unit includes a transfer unit for transferring the image data read from the first memory to the second memory (see Fig. 1 (10) and column 2 lines 47-55), and wherein the transfer unit includes a third memory for storing the image data read from the first memory, and reads rotated image data from the third memory and transfers the rotated image data to the second memory (see Fig. 1 (8), column 2 lines 34-35, 47-55, and 61-64, column 3 lines 31-40, column 4 lines 52-59, and column 5 lines 4-20).

Sato does not disclose expressly transferring the rotated image data to a second memory without transferring the rotated image data to the first memory and determining whether the rotation of the image is required or not and processing the image accordingly.

Yamaguchi discloses transferring a rotated image data to a second memory without transferring the rotated image data to the first memory (see Fig. 4 and column 12 line 66-column 13 line 25) and determining whether the rotation of the image is required or not and processing the image accordingly (see column 13 lines 2-4 and 13-16).

Regarding claim 26, Sato discloses a control method carried out in a printer that comprises a control unit having a first memory for storing image data generated based on print data received from an external apparatus, and an engine unit having a second memory for storing the image data received from the control unit and a print engine for printing the image data stored in the second memory (see Fig. 1, column 2 lines 30-33, column 3 lines 48-61, and column 4 lines 25-44), said method comprising: a storing step of storing the image data read from the first memory in a third memory (see column 2 lines 30-35), a transferring step of reading rotated image data from the third memory and transferring the rotated image data to the second memory (see column 3 lines 30-40, column 4 lines 25-44 and 52-59, and column 5 lines 4-20).

Sato does not disclose expressly transferring the rotated image data to a second memory without transferring the rotated image data to the first memory and determining whether the rotation of the image is required or not and processing the image accordingly.

Yamaguchi discloses transferring a rotated image data to a second memory without transferring the rotated image data to the first memory (see Fig. 4 and column 12 line 66-column 13 line 25) and determining whether the rotation of the image is required or not and processing the image accordingly (see column 13 lines 2-4 and 13-16).

Sato & Yamaguchi are combinable because they are from the same field of endeavor, transmission of image data, which is to be rotated, from an external device to a plotting device.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the transferring of image data to a second memory without transferring the image data to the first memory, as described by Yamaguchi, with the system of Sato.

The suggestion/motivation for doing so would have been to decrease the time needed for transfer of image data between an external device and a plotting device and an overall increase in system speed by eliminating extra traverses across a bus.

Therefore, it would have been obvious to combine Yamaguchi with Sato to obtain the invention as specified in claims 16, 19, 22, and 26.

Regarding claims 17, 20, 23, and 27, Sato and Yamaguchi disclose the system discussed in claims 16, 19, 22, and 26, and Sato further discloses a parallel interface for connecting said control unit and said engine unit to each other (see Fig. 1).

Regarding claims 18, 21, 24, and 28, Sato and Yamaguchi disclose the system discussed in claims 16, 19, 22, and 26, and Sato further discloses wherein the transfer unit includes a plurality of the third memories and wherein the transfer unit transfers one body of image data from one of the plurality of third memories to the second memory, while other image data from the first memory is stored in another of the plurality of third memories (see column 4 lines 25-44).

6. Claims 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato and Yamaguchi as applied to claims 22 and 26 above, and further in view of Nakajima.

Sato and Yamaguchi do not disclose expressly wherein said engine unit informs said control unit whether the rotation is required.

Nakajima discloses wherein said engine unit informs said control unit whether the rotation is required (see column 6 line 39-column 8 line 26).

Sato, Yamaguchi, & Nakajima are combinable because they are from the same field of endeavor, rotation of image data to be printed.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the detection of page orientation and determination of the rotation of an image, as described by Nakajima, with the system of Sato and Yamaguchi.

The suggestion/motivation for doing so would have been to provide more accurate use of rotation controls and thus decrease the production time of printed material.

Therefore, it would have been obvious to combine Nakajima with Sato and Yamaguchi to obtain the invention as specified in claim 25 and 29.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached at (571) 272-7406. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark R. Milia
Examiner
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